

# International Conference on Science and Technology for Sustainability 2026

## Concept Paper

Theme: *Enhancing Trust in Science: The Role of Science as a Public Good in Policymaking*

## Background

Two fundamental attributes of science underpin its core value as a public good: firstly, knowledge claims and the evidence upon which they rest are openly available for scrutiny and validation; and secondly, the results of scientific research are communicated promptly to the public sphere and properly circulated in order to maximize their availability and access to all. These attributes enable science to function as an accessible *global public good*, usable by anyone in the world, without hindrance to others. As a public good, science provides the foundation for policymaking, for addressing societal challenges, and for the legitimacy of democratic decision-making. Securing and strengthening trust in science has thus become a central issue in enabling science to fulfil its role as a public good in contemporary policymaking.

In recent years, concerns about trust in science have intensified. As a result, science has sometimes struggled to make contributions to policymaking that are inherently expected of *science for policy*. For example, scientific knowledge is indispensable to policymaking on issues such as climate change, infectious diseases, and artificial intelligence (AI). Yet, populism and the spread of mis- and disinformation have sporadically undermined public trust in science, forcing it to link scientific evidence to policymaking.

For science to function as a public good in society and to contribute effectively to policymaking, it is essential, therefore, to establish social trust in science and sustain it through appropriate governance and dialogue with civil society.

## Overview of the Conference

The International Conference on Science and Technology for Sustainability 2026 will examine—from the perspective of strengthening and sustaining trust in science for policy—the following three issues in a transversal manner. The conference will discuss the appropriate structuring of collaboration between science, policy, and society:

1. Promoting participatory science communication to build societal trust in science
2. Establishing transparent and responsible science and technology governance, with a focus on AI
3. Ensuring the robust linkage between science and policy

### Issue 1: Promoting Participatory Science Communication to Build Societal Trust in Science

Trust in science for policy is closely linked to trust in democratic institutions. Building citizens' trust in specific policies and in democratic systems requires the co-creation and sharing of scientific knowledge with diverse stakeholders and publics. In addition, it must ensure transparency throughout these processes. In Japan, challenges have been identified such as insufficient dialogue between citizens and government in the policymaking process. In response, efforts have been undertaken to promote science communication, including the creation and promotion of spaces for dialogue and collaboration involving diverse stakeholders from the early stages of policymaking. Dissemination efforts have emerged also to provide experiential learning opportunities for children and students.

Recognizing that the promotion of science communication is a global trend, this conference will explore appropriate approaches while at the same time sharing discussion and insight from forums such as the International Science Council (ISC).

**Keywords:** Countering mis- and disinformation / Strengthening science education and scientific literacy / Building multi-layered, participatory science communication systems / Responsible use of AI tools to support public understanding

## Issue 2: Establishing Transparent and Responsible Science and Technology, with a focus on AI

Enhancing trust in science requires clear governance frameworks for scientific activity. Amid ongoing openness and internationalisation in research, the Science Council of Japan (SCJ) has emphasised that research integrity must be ensured autonomously by the scientific community itself. Moreover, the Science Council has also stressed the importance of proactive governance from the perspective of safeguarding academic freedom and research autonomy. With the rapid advancement of emerging technologies, AI in particular, these governance challenges now extend beyond the scientific community. They have become increasingly salient for domestic and international institutional frameworks and for international coordination. The SCJ has issued recommendations noting that conventional regulatory models are insufficient to address the risks posed by rapidly evolving emerging technologies - notably generative AI - and that agile and multi-stakeholder governance should therefore be pursued.

From these perspectives, the conference will examine appropriate governance models for science and emerging technologies, including AI, with a focus on balancing academic freedom and social responsibility.

**Keywords:** Research integrity / Openness / Responsible science governance / Responsible AI development / International cooperation in governance

## Issue 3: Ensuring Sound Linkage between Science and Policy

To enhance the effectiveness and societal relevance of science in policymaking, it is essential to appropriately connect scientific practices that are transparent, accountable, and inclusive with the process of policymaking and policy implementation. Specifically, clarifying how scientific evidence is collected and evaluated, and through what value judgments and societal considerations it is reflected in policy decisions, forms the basis for the legitimacy and social acceptance of policies. In this regard, the Science Council of Japan has repeatedly emphasised the importance of a “sound linkage between science and policy.” It has noted that, for scientific advice to be effectively utilised in policy, a constructive relationship with government must be maintained while ensuring the independence and autonomy of academia. The ISC has similarly pointed out that “science can

only inform policy if it is accessible, usable, and trusted.” It emphasises that strengthening science–policy–society interfaces through the establishment and operation of institutionalized dialogue and advisory mechanisms with policymakers and civil society—while safeguarding the independence, transparency, and accountability of scientific advice—is indispensable for building trust.

From these diverse perspectives, the conference will address the conditions for healthy science–policy linkages, including transparency in the use of scientific evidence, forms of dialogue among science, policy, and civil society, and international best practice.

**Keywords:** Collaboration between science and policy / Institutional design for evidence-based policymaking (EBPM) / AI-supported policymaking / Cross-border policy coordination

This conference aims to serve as a forum for dialogue, bringing together diverse perspectives on themes such as trust in science, engagement in policymaking, and the public good. Building on these issues and with the various recommendations issued by the SCJ and the ISC, participants are encouraged to deepen their discussions from their respective viewpoints. At the same time, the conference seeks to move beyond the confines of existing frameworks presented in these recommendations. It seeks to incorporate on-the-ground insights and international perspectives to foster more creative and forward-looking discussion.